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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNET DOCKET NO.	CONFIRMATION NO.
10/560,034	12/08/2005	Hirokazu Ishikawa	053429	8323
	590 01/18/200 HATTORI, DANIEL	EXAMINER		
	TICUT AVÉNUE, NV	ROSE, ROBERT A		
WASHINGTON, DC 20036			ART UNIT	PAPER NUMBER
			3723	
	,			
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		01/18/2007	DADED	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

			\mathcal{H}^{1}		
	•	Application No.	Applicant(s)		
Office Action Summary		10/560,034	ISHIKAWA, HIROKAZU		
		Examiner	Art Unit		
		Robert Rose	3723		
The Period for Rep	MAILING DATE of this communication apoly	opears on the cover sheet wi	th the correspondence address		
WHICHEVE - Extensions or after SIX (6) - If NO period to replay record to replay reco	ENED STATUTORY PERIOD FOR REPIER IS LONGER, FROM THE MAILING If time may be available under the provisions of 37 CFR 1 MONTHS from the mailing date of this communication for reply is specified above, the maximum statutory periodly within the set or extended period for reply will, by statueived by the Office later than three months after the mailing term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNION (136(a). In no event, however, may a red will apply and will expire SIX (6) MON the, cause the application to become AB	CATION. reply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).		
Status	•	·			
1)⊠ Resp	onsive to communication(s) filed on <u>02 l</u>	November 2006.			
· ·	This action is FINAL . 2b) This action is non-final.				
3) Since	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
close	d in accordance with the practice under	Ex parte Quayle, 1935 C.D.	. 11, 453 O.G. 213.		
Disposition of	Claims				
4)⊠ Claim	n(s) <u>1 and 3-14</u> is/are pending in the app	olication.			
	f the above claim(s) is/are withdra				
5) Claim	n(s) is/are allowed.				
6)⊠ Claim	n(s) <u>1,3-7 and 9-14</u> is/are rejected.				
	n(s) <u>8</u> is/are objected to.				
. 8)☐ Claim	n(s) are subject to restriction and/	or election requirement.	·		
Application Pa	apers				
9)∐ The s	pecification is objected to by the Examin	ner.			
10) The d	rawing(s) filed on is/are: a) ☐ ac	cepted or b) objected to	by the Examiner.		
	cant may not request that any objection to the				
Repla	cement drawing sheet(s) including the corre	ction is required if the drawing	(s) is objected to. See 37 CFR 1.121(d).		
11) The o	ath or declaration is objected to by the E	Examiner. Note the attached	Office Action or form PTO-152.		
Priority under	35 U.S.C. § 119		•		
12)∭ Ackno a)∭ All	owledgment is made of a claim for foreig b)☐ Some * c)☐ None of:	n priority under 35 U.S.C. §	119(a)-(d) or (f).		
1.	Certified copies of the priority documen	nts have been received.			
2.	Certified copies of the priority documer	nts have been received in A	pplication No		
3.□	Copies of the certified copies of the pri	•	received in this National Stage		
******	application from the International Burea	, , , , , , , , , , , , , , , , , , , ,			
* See the	e attached detailed Office action for a lis	at of the certified copies not	received.		
Attachment(s)		·			
	ferences Cited (PTO-892)	4) 🗍 Interview S	Summary (PTO-413)		
2) Notice of Dra	aftsperson's Patent Drawing Review (PTO-948)	Paper No(s	s)/Mail Date		
3) Information (Paper No(s)/	Disclosure Statement(s) (PTO/SB/08) (Mail Date	5) Notice of Ir 6) Other:	nformal Patent Application		

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DETAILED ACTION

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- 1. Claim 2 has been canceled.
- 2. Claims 6-14 have been added.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 3, 6-7, and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuji(Japan No. 06-219762) in view of Wakayama et al. Yuji(Japan No. 06-219762) disclose a diamond wheel for forming a scribe line on a surface of a brittle material comprising substantially all of the subject matter set forth in Applicant's claims above. Note scribing disc illustrated in figures 1-3, and having grain size within the range recited. Wakayama et al disclose a scribing disc having an opening angle and pitch within the ranges recited by Applicant. To provide the scribing disc of Yuji with an opening angle and pitch within the range recited, which has been shown to produce acceptable scribing for brittle materials such as glass, would have been obvious in view of Wakayama et al.
- 5. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuji(Japan No. 06-219762) in view of Wakayama et al, and further in view of Ishikawa. To further provide means for oscillating the scribing tool while traversing it over the surface of the brittle material to be cut, as disclosed in Ishikawa, in order to improve the subsequent breaking step, would have been obvious as taught by Ishikawa.

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6. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

- 7. Applicant's arguments filed November 2, 2006 have been fully considered but they are not persuasive. Applicant has introduced the limitation of claim 2 into independent claim 1, and amended claim 5 to include a recitation of blade shape and range of pitch. These features are deemed to be suggested by the secondary reference to Wakayama et al. Further, oscillation of the tool support to improve the subsequent breaking step, is deemed to be taught by Ishikawa.
- 8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Rose whose telephone number is (571) 272-4494. The examiner can normally be reached on Monday through Thursday, and on alternate Fridays, from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail, can be reached at (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert Rose Primary Examiner Art Unit 3723

Rr

January 10, 2007.